



## GLOBAL HEALTHCARE WASTE PROJECT

# STUDENT GUIDE

*MODULE 9: CLASSIFICATION OF HEALTHCARE WASTE*

*MODULE 10: SEGREGATION OF HEALTHCARE WASTE*



## MODULE 9: CLASSIFICATION OF HEALTHCARE WASTE

<b>Estimated Time</b>	<ul style="list-style-type: none"><li>• Lecture: 45 minutes</li><li>• Activity: 2 hours * to be completed after Module 9 and Module 10</li></ul>
<b>Module Overview</b>	<ul style="list-style-type: none"><li>• Describe the general classifications of healthcare waste</li><li>• Present examples of each classification</li></ul>
<b>Learning Objectives</b>	<ul style="list-style-type: none"><li>• List the major classifications and typical characteristics of healthcare waste</li><li>• Recognize the waste classifications that pose the highest risk</li><li>• Apply basic principles to categorize waste items into their proper classifications</li></ul>
<b>Student Preparation</b>	<ul style="list-style-type: none"><li>• Blue Book Chapter 2</li><li>• Think about how healthcare wastes are classified in your facility</li></ul>
<b>Review Questions (most of these questions relate to waste segregation, which is the related topic of the next module)</b>	<ul style="list-style-type: none"><li>• How does your facility classify healthcare wastes? What are some examples of sharps waste that pose a major risk in your own facility, or that you would expect to pose problems in healthcare facilities, in general? What about chemical wastes? Pharmaceutical wastes? Radioactive wastes?</li><li>• What are some facility-specific classification and segregation guidelines? Does your facility use color-coding?</li><li>• Does your facility have sufficient resources to handle waste properly and effectively? How can your facility improvise if resources are lacking?</li><li>• Is the segregation of wastes monitored in your facility? If not, is there any technique that exists for keeping track of waste segregation?</li><li>• What works within your facility to improve segregation? What doesn't work?</li></ul>

## MODULE 10: SEGREGATION OF HEALTHCARE WASTE

<b>Estimated Time (*subject to change)</b>	<ul style="list-style-type: none"> <li>• Lecture: 1 hour and 15 minutes</li> <li>• Activity: 2 hours * to be completed after Module 9 and Module 10. You may choose one or all of the activities based on how much time you have.</li> </ul>
<b>Module Overview</b>	<ul style="list-style-type: none"> <li>• Review waste classifications</li> <li>• Describe why waste segregation is important</li> <li>• Describe color-coding and waste containers</li> <li>• Demonstrate segregation of healthcare waste</li> </ul>
<b>Learning Objectives</b>	<ul style="list-style-type: none"> <li>• Explain why segregation is important</li> <li>• Demonstrate segregation of healthcare waste</li> <li>• Discuss acceptable options for commercial color-coded bags and sharps containers</li> <li>• Create informational posters and signs specific to waste segregation</li> </ul>
<b>Student Preparation</b>	<ul style="list-style-type: none"> <li>• Blue Book Chapter 7</li> <li>• Think about how healthcare wastes are segregated in your facility</li> </ul>
<b>Review Questions (same set of questions included in Module 9, as segregation is related to classification)</b>	<ul style="list-style-type: none"> <li>• How does your facility classify healthcare wastes? What are some examples of sharps waste that pose a major risk in your own facility, or that you would expect to pose problems in healthcare facilities, in general? What about chemical wastes? Pharmaceutical wastes? Radioactive wastes?</li> <li>• What are some facility-specific classification and segregation guidelines? Does your facility use color-coding?</li> <li>• Does your facility have sufficient resources to handle waste properly and effectively? How can your facility improvise if resources are lacking?</li> <li>• Is the segregation of wastes monitored in your facility? If not, is there any technique that exists for keeping track of waste segregation?</li> <li>• What works within your facility to improve segregation? What doesn't work?</li> </ul>

INSERT SLIDES

INSERT READINGS/REFERENCES/HOMEWORK

*ACTIVITY: MODULE 9 AND 10: EXERCISES*

Note: These exercises will be conducted after Module 9 and Module 10 are presented.

The purpose of this activity is to educate participants about classification and segregation of wastes (how to select the right containers)

**Module 9 and 10, Exercise 1: Classification Matrix**

How would you classify the following items?

- Sharps
- Infectious
- Pathological
- Pharmaceutical
- Chemical
- Radioactive
- General (non-hazardous)

#	Item	Sharp	Infect	Patho	Pharm	Chem	Radio	General
1	Bandage saturated with blood							
2	Empty IV bag							
3	IV bag containing fluid blood							
4	Broken thermometer							
5	Unused (clean) hypodermic syringe							
6	Soiled disposable diaper							
7	Dirty glove							
8	Cotton swab with little dried blood							
9	Clean broken glassware							
10	Used disinfectant solution							
11	Empty juice bottle used by patient							
12	Cotton swab with little alcohol (ethanol)							

13	Expired antibiotics							
14	Eye wash							
15	Old fluorescent lamp							

### Module 9 and 10 Exercise 2: Segregation activities

1. Each group has been given surrogate waste items (such as sharps, anatomical wastes, paper, gloves, needles, diapers, bottles etc) and color-coded containers (based on what is available by country laws).
2. Each person in the group will take a turn to place a waste item in the proper container.
3. With each turn, the group checks if everyone agrees with the placement.
4. If not, you will have to explain why you disagree with the placement until consensus is reached.
5. If no consensus is reached, the group brings the waste item to the attention of the whole class.
6. Responses will be recorded in the following table.

**[Note to instructor: replace the color codes and containers below with the required color codes and containers used in the country.]**

Waste type	Yellow bins	Red bins	Blue Bins	Puncture Proof Container	General Waste

### Module 9 and 10 Exercise 3: Segregation posters

The purpose of this activity is for you to learn to design simple but effective posters related to segregation.

Each group will:

- Select an area of the facility

- Identify the hazards, and/or a particular group of employees you want to educate. (For example, do you want to create a poster or sign in your local language to help the waste handlers in the wards)
- Create an informational posters, or signage, specific to waste segregation.
- Each group will present their hand-drawn poster to the class for discussion.



## DE-BRIEF AND SUMMARY NOTES